What is claimed is:

1. A light emitting diode comprising:

a light emitting structure having a plurality of light emitting layers which generate light in responsive to injection current;

a transparent conductive oxide layer formed on said light emitting structure;

a metal reflective layer formed on said transparent conductive oxide layer; and

a conductive base substrate formed on said metal reflective layer.

2. The light emitting diode according to claim 1, wherein said conductive base substrate is selected from the group consisting of copper, aluminum, SiC, AlN and silicon.

3. The light emitting diode according to claim 1, wherein said transparent conductive oxide layer is selected from the group consisting of In_2O_3, SnO_2,CdO, ZnO, ITO, CTO, $CuAlO_2$,$CuGaO_2$ and $SrCu_2O_2$.

4. The light emitting diode according to claim 1, wherein said metal reflective layer is selected from the group consisting of Au, Al and Ag.

5. The light emitting diode according to claim 1, further comprising a metal bonding layer formed in between said conductive base

substrate and said metal reflective layer.

6. The light emitting diode according to claim 5, wherein said bonding layer is selected from the group consisting of In, Au-Sn alloy, Au-Si alloy, Pb-Sn alloy and Au-Ge alloy, PdIn.

7. The light emitting diode according to claim 5, further comprising a diffusion barrier layer formed in between said metal reflective layer and said metal bonding layer.

8. The light emitting diode according to claim 7, wherein said diffusion barrier layer is selected from the group consisting of conductive oxide layer, refractory metal layer, and refractory metal silicide.

9. A light emitting diode comprising:

a conductive base substrate;

a light emitting structure having a plurality of light emitting layers which generate light in responsive to injection current;

a transparent conductive oxide layer formed on said light emitting structure;

a metal reflective layer formed on said transparent conductive oxide layer; and

a metal bonding layer formed in between said conductive base substrate and said metal reflective layer so as to bond said conductive base substrate and said light emitting structure.

10. The light emitting diode according to claim 9, wherein said conductive base substrate is a heat dissipation and electrixal conductive layer selected from the group consisting of copper, aluminum, SiC, AlN and silicon.

11. The light emitting diode according to claim 9, wherein said transparent conductive oxide layer is selected from the group consisting of In_2O_3, SnO_2,CdO, ZnO, ITO, CTO, $CuAlO_2$,$CuGaO_2$ and $SrCu_2O_2$.

12. The light emitting diode according to claim 9, wherein said metal reflective layer is selected from the group consisting of Au, Al and Ag.

13. The light emitting diode according to claim 9, wherein said metal bonding layer is selected from the group consisting of In, Au-Sn alloy, Au-Si alloy, Pb-Sn alloy and Au-Ge alloy, PdIn.

14. The light emitting diode according to claim 13, further comprising a diffusion barrier layer formed in between said metal reflective layer and said metal bonding layer.

15. The light emitting diode according to claim 14, wherein said diffusion barrier layer is selected from the group consisting of conductive oxide layer, refractory metal layer, and refractory metal

silicide.

16 A method of manufacturing a light emitting diode, comprising the steps of:

providing a light emitting diode epi-layers which has a plurality of III--V compound semiconductor layers grown on a temporary substrate;

forming a transparent conductive oxide layer atop said epi-layers;

forming a metal reflective layer on said transparent conductive oxide layer :

providing a base substrate having a first ohmic contact metal layer formed on one side surface and a second ohmic contact metal formed on the other side surface, wherein said first ohmic contact metal layer is served as a first electrode;

depositing a metal bonding layer on said second ohmic contact metal layer or on said metal reflective layer;

using said metal bonding layer to adhere said epi-layers with said base substrate;

removing said temporary substrate; and

forming an ohmic contact metal layer on an exposed surface of said epi-layers which serves as a second electrode.

17. The method according to claim 16, after said step of forming a metal reflective layer and before said steps of adhering said LED epi-wafer with said base substrate further comprising a step of forming a diffusion barrier on said metal reflective layer so as to

prevent said metal bonding layer from reacting with said metal reflective layer.

18. The light emitting diode according to claim 16, wherein said conductive base substrate is a heat dissipation and electrical conductive layer selected from the group consisting of copper, aluminum, SiC, AlN and silicon.